RECEIVED
CENTRAL FAX CENTER
JAN 16 2007

REMARKS

Present Status of the Application

The Office Action rejected claims 4, 5 and 7 under 35 U.S.C. 102(b) as being anticipated by Pevzner et al. (US-5,520,000) (hereinafter Pevzner). The Office Action rejected claim 9 under 35 U.S.C. 103(a) as being anticipated over Pevzner in view of White et al. (US-6,810,924) (hereinafter White). The Office Action objected claim 6, 8 and 10 as being depend upon a rejected base claim.

For at least the following reasons, Applicants respectfully submit claims 4-10 are in proper condition for allowance and reconsideration of this application is respectfully requested.

Discussion of the claim rejection under 35 USC 102(b)

The Office Action rejected claims 4, 5 and 7 under 35 U.S.C. 102(b) as being anticipated by Pevzner. In response to the rejection thereto, Applicants traverse this rejection. As such, Applicants submit that the claims 4, 5 and 7 and its dependent claims 6 and 8 are novel and unobvious over Pevzner, or any of the other cited references, taken alone or in combination, and thus should be allowed.

The features are recited in claim 4. For example, independent claim 4 recited the features.

With respect to claim 4, independent claim 4 recites the features as follows:

4. A fuel filling apparatus, for filling a hydrogen gas into a fuel tank of an automobile that uses the hydrogen gas as a fuel, the fuel filling apparatus comprising **a heat exchanger** for cooling the hydrogen gas.

... (Emphasis added)

Claims 5 also recite the similar features.

Pevzner (col. 4, lines 2-7) discloses, "A gaseous hydrogen outlet conduit 18 feeds gas to a lower portion of a gas/liquid mixer 20. A liquid hydrogen outlet conduit 22 feeds liquid hydrogen through a control valve 24 to an upper portion of gas/liquid mixer 20. A porous packing 25 enables gas entering, via conduit 18, into gas/liquid mixer 20 to percolate upwardly to an outlet conduit 26." Pevzner does not tech a heat exchanger for cooling the hydrogen gas. Moreover, the numbers 20 and 25 in fig. 1 of Pevzner refer gas/liquid mixer and porous packing, respectively. The numbers 20 and 25 in fig. 1 of Pevzner are not heat exchanger. The gas/liquid mixer and porous packing themselves do not have the function of heat exchanging. The Pevzner fails to teach or suggest the limitation of "a heat exchanger for cooling the hydrogen gas." as required by the present invention, as set forth in claims 4 and 5. Therefore, claims 4 and 5 should not be considered as being anticipated by Pevzner or any of the other cited references, taken alone or in combination, and is submitted as allowable.

The features are recited in claim 7. For example, independent claim 7 recited the features. With respect to claim 4, independent claim 4 recites the features as follows:

7. A fuel filling apparatus, for filling a hydrogen gas into a fuel tank of an automobile that uses the hydrogen gas as a fuel, the fuel filling apparatus comprising:

a flow modulating valve, for modulating a supply amount of a hydrogen gas; and

a cooling means, for cooling the hydrogen gas passing through the flow modulating valve.

... (Emphasis added)

Pevzner (col. 4, lines 2-7) discloses, "A gaseous hydrogen outlet conduit 18 feeds gas to a lower portion of a gas/liquid mixer 20. A liquid hydrogen outlet conduit 22 feeds liquid hydrogen through a control valve 24 to an upper portion of gas/liquid mixer 20. A porous packing 25 enables gas entering, via conduit 18, into gas/liquid mixer 20 to percolate upwardly to an outlet conduit 26." Pevzner does not tech **cooling means** for cooling the hydrogen gas. Moreover, the numbers 20 and 25 in fig. 1 of Pevzner refer gas/liquid mixer and porous packing, respectively. The numbers 20 and 25 in fig. 1 of Pevzner are not **cooling means**. The gas/liquid mixer and porous packing themselves do not have the function of **cooling**. The Pevzner fails to teach or suggest the limitation of "**a cooling means**, for cooling the hydrogen gas passing through the flow modulating valve." as required by the present invention, as set forth in claim 7. Therefore, claim 7 should not be considered as being anticipated by Pevzner or any of the other cited references, taken alone or in combination, and is submitted as allowable.

For failing to teach each and every limitation as set forth in claims 4, 5 and 7, Pevzner cannot be construed as anticipating the present invention, as set forth in claims 4, 5 and 7. As such, claims 4, 5 and 7 are submitted to be novel and unobvious over Pevzner, or any of the other cited references, taken alone or in combination, and thus should be allowed. For at least the same reasons, dependent claims 6 and 8 patently define over the prior art as a matter of law.

Discussion of the claim rejection under 35 USC 103(a)

The Office Action rejected claim 9 under 35 U.S.C. 103(a) as being anticipated over Pevzner in view of White. In response to the rejection thereto, Applicants have amended claim 9, and hereby otherwise traverse this rejection. As such, Applicants submit that the claim 9 and its dependent claim 10 are novel and unobvious over Pevzner, White or any of the other cited references, taken alone or in combination, and thus should be allowed.

The features are recited in claim 9. For example, independent claim 9 recited the features.

With respect to claim 9, independent claim 9 recites the features as follows:

> 9. A fuel filling method, ... comprising:
>
> **cooling the hydrogen gas passing through the flow modulating valve by using the cooling means**; and
>
> filling the cooled hydrogen gas into the fuel tank.
>
> ... (Emphasis added)

Pevzner (col. 4, lines 2-7) discloses, "A gaseous hydrogen outlet conduit 18 feeds gas to a lower portion of a gas/liquid mixer 20. A liquid hydrogen outlet conduit 22 feeds liquid

hydrogen through a control valve 24 to an upper portion of gas/liquid mixer 20. A porous packing 25 enables gas entering, via conduit 18, into gas/liquid mixer 20 to percolate upwardly to an outlet conduit 26." Pevzner does not tech **cooling the hydrogen gas passing through the flow modulating valve by using the cooling means**. Moreover, the numbers 20 and 25 in fig. 1 of Pevzner refer gas/liquid mixer and porous packing, respectively. The numbers 20 and 25 in fig. 1 of Pevzner are not **cooling means**. The gas/liquid mixer and porous packing themselves do not have the function of **cooling**. The Pevzner fails to teach or suggest the limitation of "**cooling the hydrogen gas passing through the flow modulating valve by using the cooling means**" as required by the present invention, as set forth in claims 9.

White discloses a compressed gas stream introduction method and filling station. The publication date of White is September 23, 2004. However, the present invention claims the priority of JP 2002-279230 (filing date: September 25, 2002), JP 2002-291341 (filing date: October 3, 2002) and JP 2002-295151 (filing date: October 8, 2002). The priority dates are earlier than the publication date of White. White is not an effective cited reference.

For failing to teach each and every limitation as set forth in claim 9, Pevzner cannot be construed as anticipating the present invention, as set forth in claim 9. As such, claim 9 is submitted to be novel and unobvious over Pevzner, White, or any of the other cited references, taken alone or in combination, and thus should be allowed. For at least the same reasons, dependent claim 10 patently define over the prior art as a matter of law.

RECEIVED
CENTRAL FAX CENTER
JAN 16 2007

CONCLUSION

For at least the foregoing reasons, it is believed that all the pending claims 4-10 of the present application patently define over the prior art and are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Respectfully submitted,
J.C. PATENTS

Date: 1/16/2007

Jiawei Huang
Registration No. 43,330

4 Venture, Suite 250
Irvine, CA 92618
Tel.: (949) 660-0761
Fax: (949)-660-0809